5. Schematic Diagrams

5-1 MAIN 1

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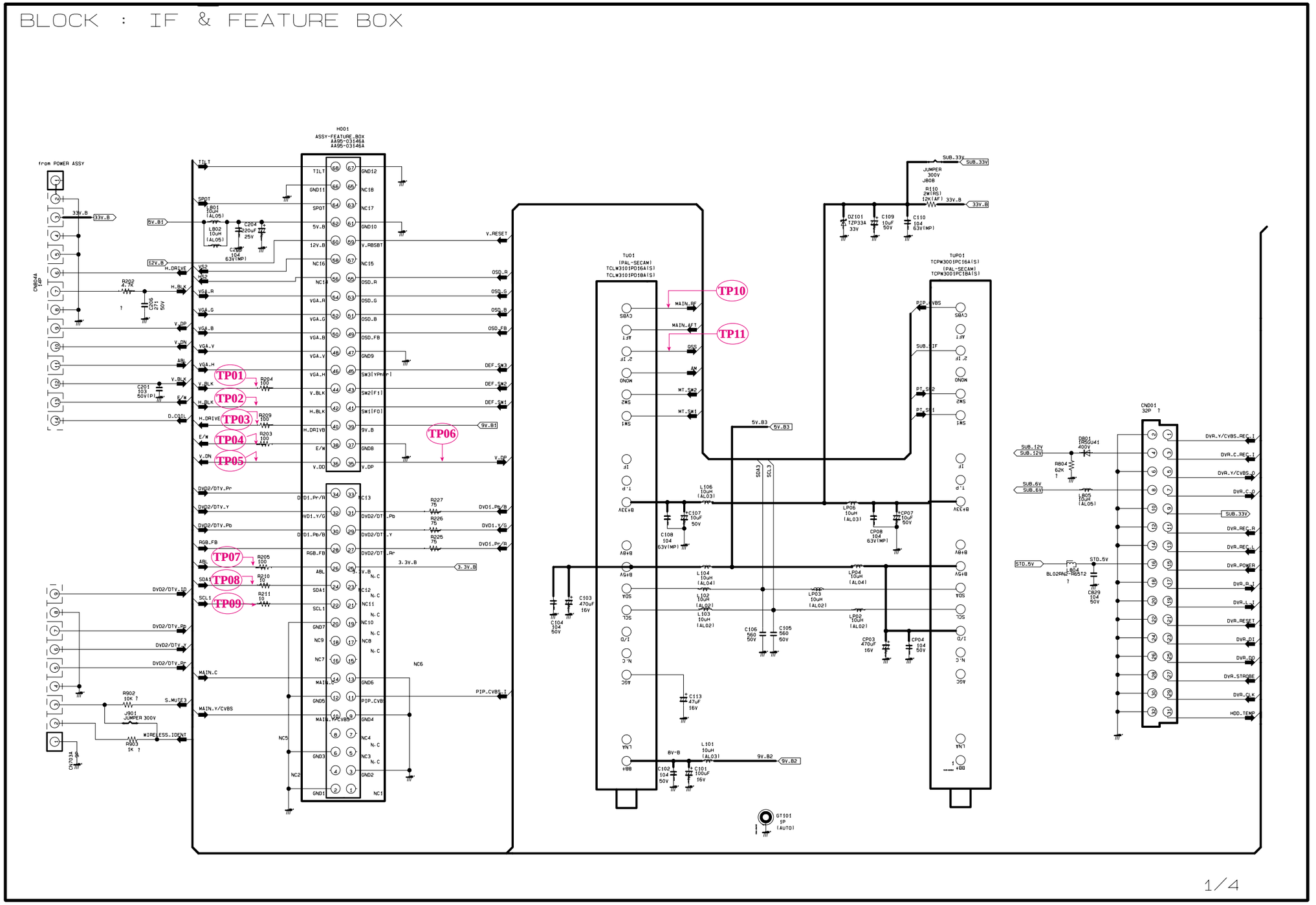
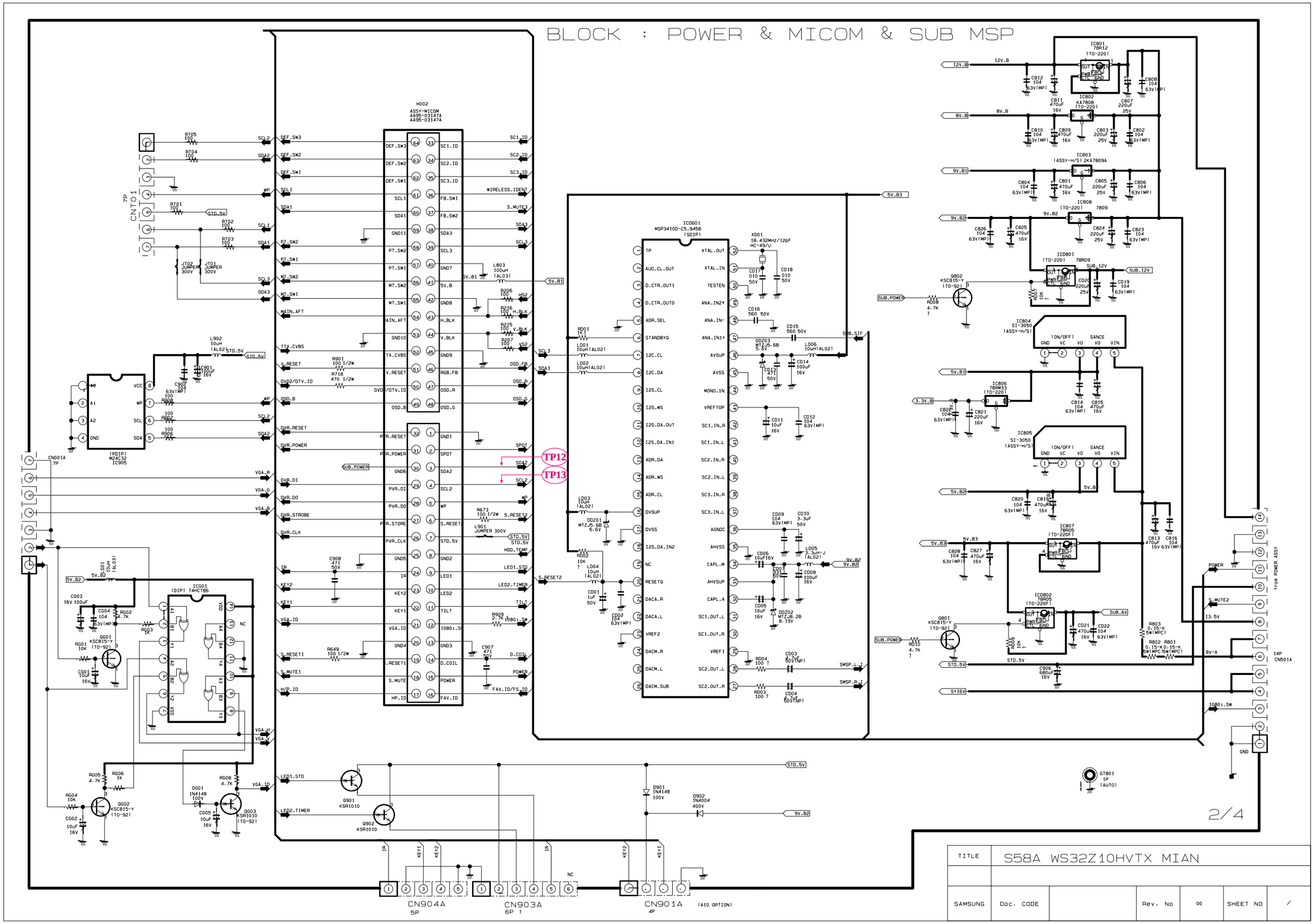
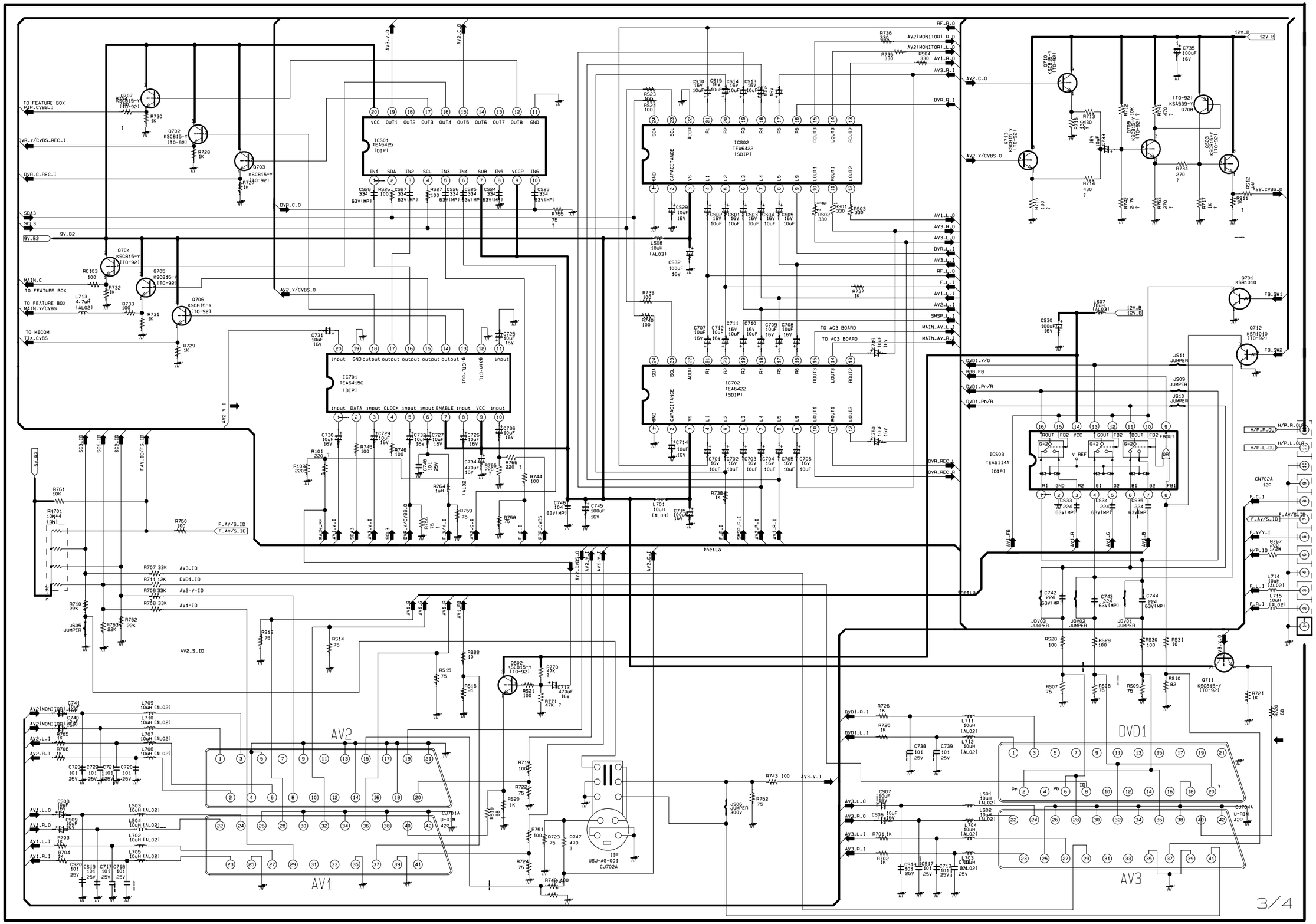


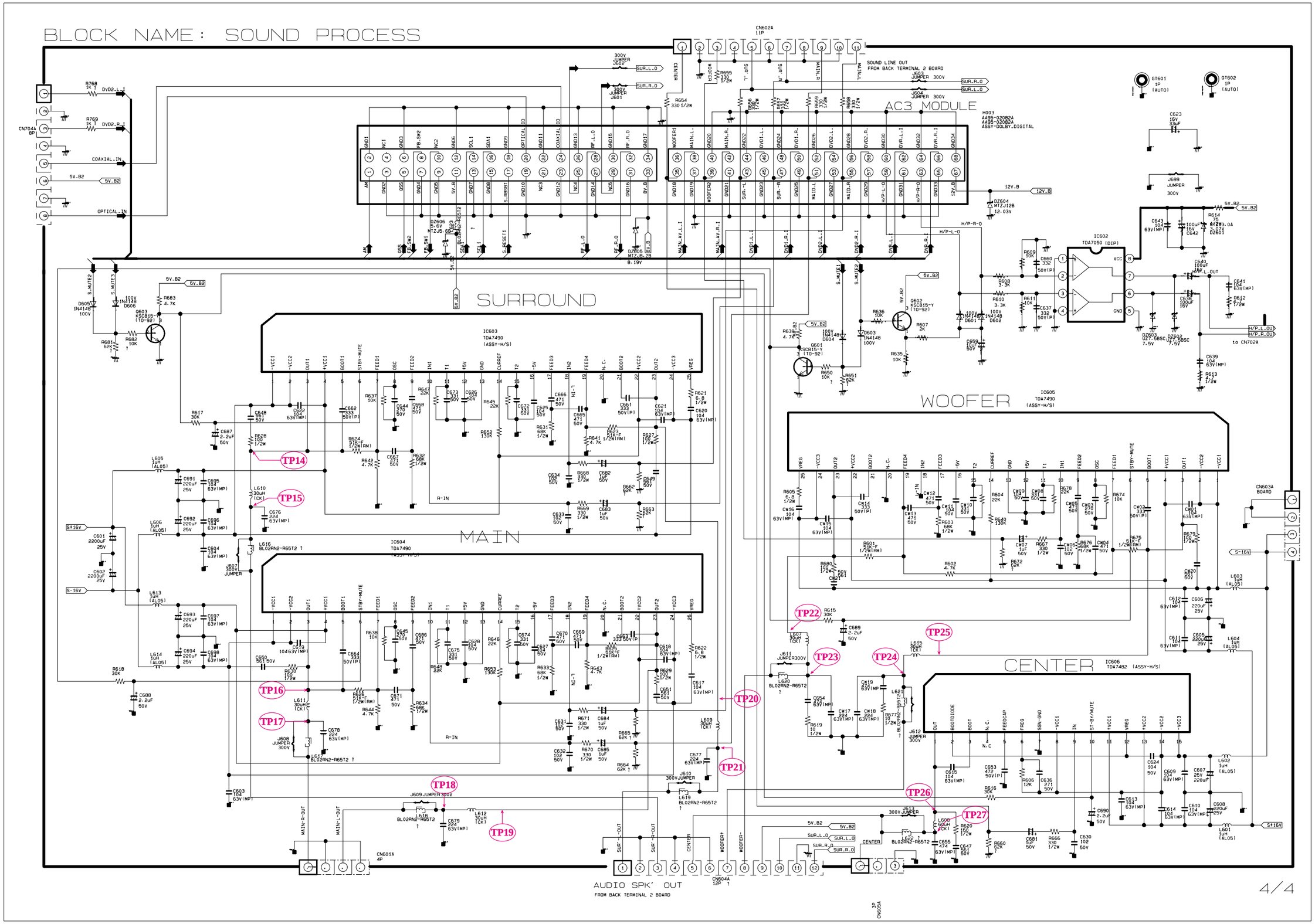
5-2 MAIN 2


BLOCK : POWER & MICOM & SUB MSP
H002
ASSY-MICOM
AA95-03147A
AA95-03147A
ICD601
MSP3410D-C5.9458
(SDIP)
ICG01
(DIP) 74HC86
IC801
78R12
(TO-220)
IC802
KA7808
(TO-220)
IC803
(ASSY-H/S) 2KA7809A
ICB01
(TO-220) 78R09
IC804
SI-3050
(ASSY-H/S)
IC805
SI-3050
(ASSY-H/S)
IC806
78RM33
(TO-220)
IC807
78R05
(TO-220F)
ICD802
78R05
(TO-220F)
IC808
(TO-220) 7809
12V_B
8V_B
9V_B1
9V_B2
5V_B3
5V_B1
5V_B2
3.3V_B
SUB_12V
SUB_6V
SUB_POWER
STD_5V
S+16V
SUB_SIF
SMSP_L_I
SMSP_R_I
TP12
TP13
S_RESET2
CN904A
5P
CN903A
6P ?
CN901A
4P
(AIO OPTION)
CN501A
4P
from POWER ASSY
GT801
1P
(AUTO)
2/4
TITLE
S58A WS32Z10HVTX MIAN
SAMSUNG
Doc. CODE
Rev. No
00
SHEET NO
/

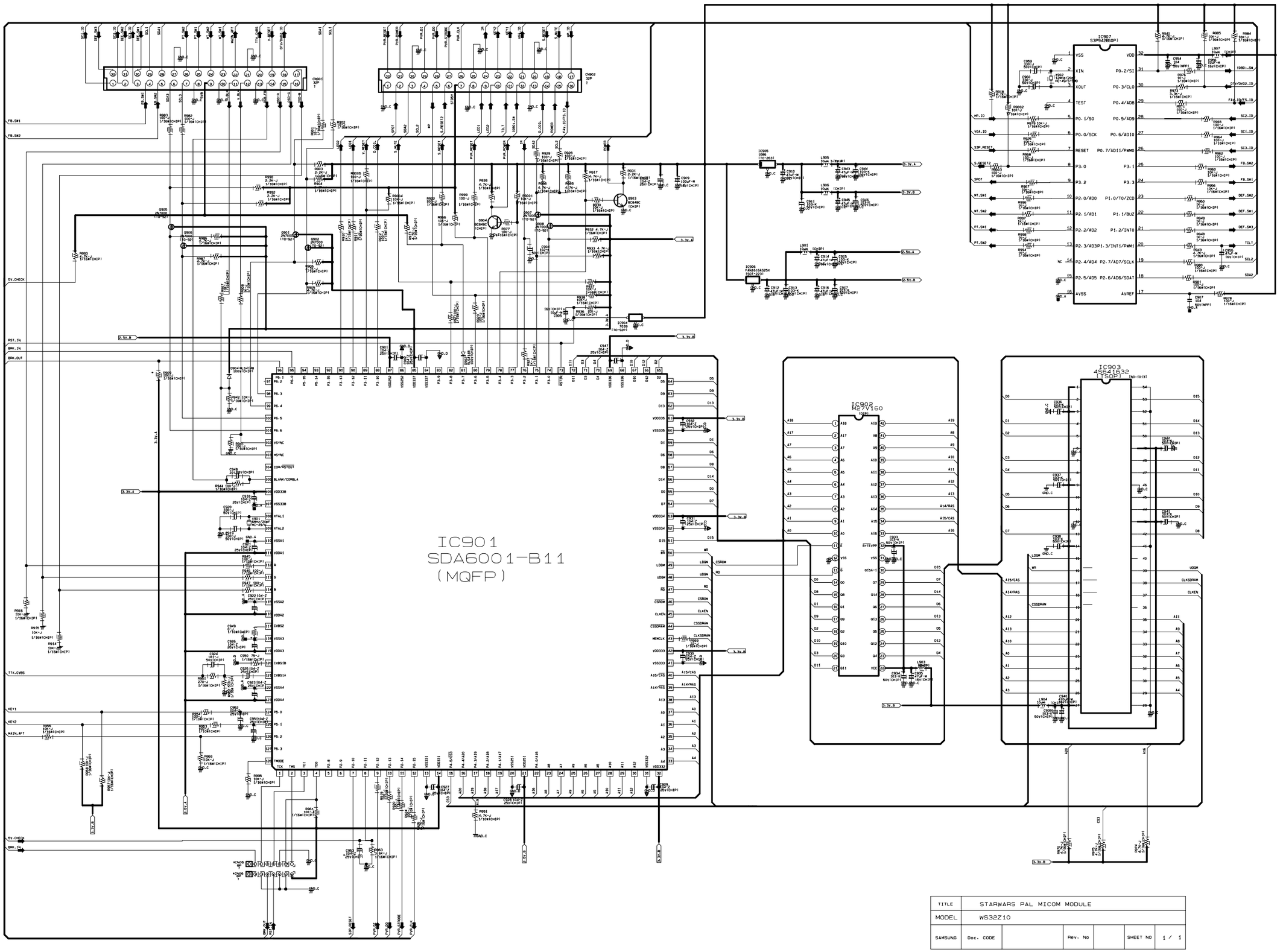
5-3 MAIN 3


TO FEATURE BOX PIP_CVBS_I
DVR_Y/CVBS_REC_I
DVR_C_REC_I
SDA3
SCL3
9V_B2
MAIN_C
TO FEATURE BOX
TO FEATURE BOX MAIN_Y/CVBS
TO MICOM Tx_CVBS
AV3_V_O
AV2_C_O
AV2_Y/CVBS_O
DVR_C_O
ICS01 TEA6425 (DIP)
ICS02 TEA6422 (SDIP)
IC701 TEA6415C (DIP)
IC702 TEA6422 (SDIP)
ICS03 TEA5114A (DIP)
AV2
AV1
AV3
DVD1
RF_R_O
AV2(MONITOR)_R_O
AV2(MONITOR)_L_O
AV1_R_O
AV3_R_I
DVR_R_I
AV2_Y/CVBS_I
AV1_L_O
AV3_R_O
AV3_L_O
DVR_L_I
AV3_L_I
RF_L_O
F_L_I
AV1_L_I
AV2_L_I
SMSP_L_I
MAIN_AV_L_I
MAIN_AV_R_I
TO AC3 BOARD
TO AC3 BOARD
DVR_REC_L
DVR_REC_R
AV1_FB
AV1_R
AV1_G
AV1_B
DVD1_Y/G
RGB_FB
DVD1_Pr/R
DVD1_Pb/B
H/P_R_OUT
H/P_L_OUT
F_C_I
F_AV/S_ID
F_V/Y_I
H/P_ID
F_L_I
F_R_I
12V_B
FB_SW1
FB_SW2
AV3_ID
DVD1_ID
AV2-V-ID
AV1-ID
AV2_S_ID
F_AV/S_ID
JS05 JUMPER
JS09 JUMPER
JS10 JUMPER
JS11 JUMPER
JDV03 JUMPER
JDV02 JUMPER
JDV01 JUMPER
CJ701A U-RIM 42P
CJ702A
CJ704A U-RIM 42P
11P USJ-AG-001
JS06 JUMPER 300V
CN702A 12P
3/4

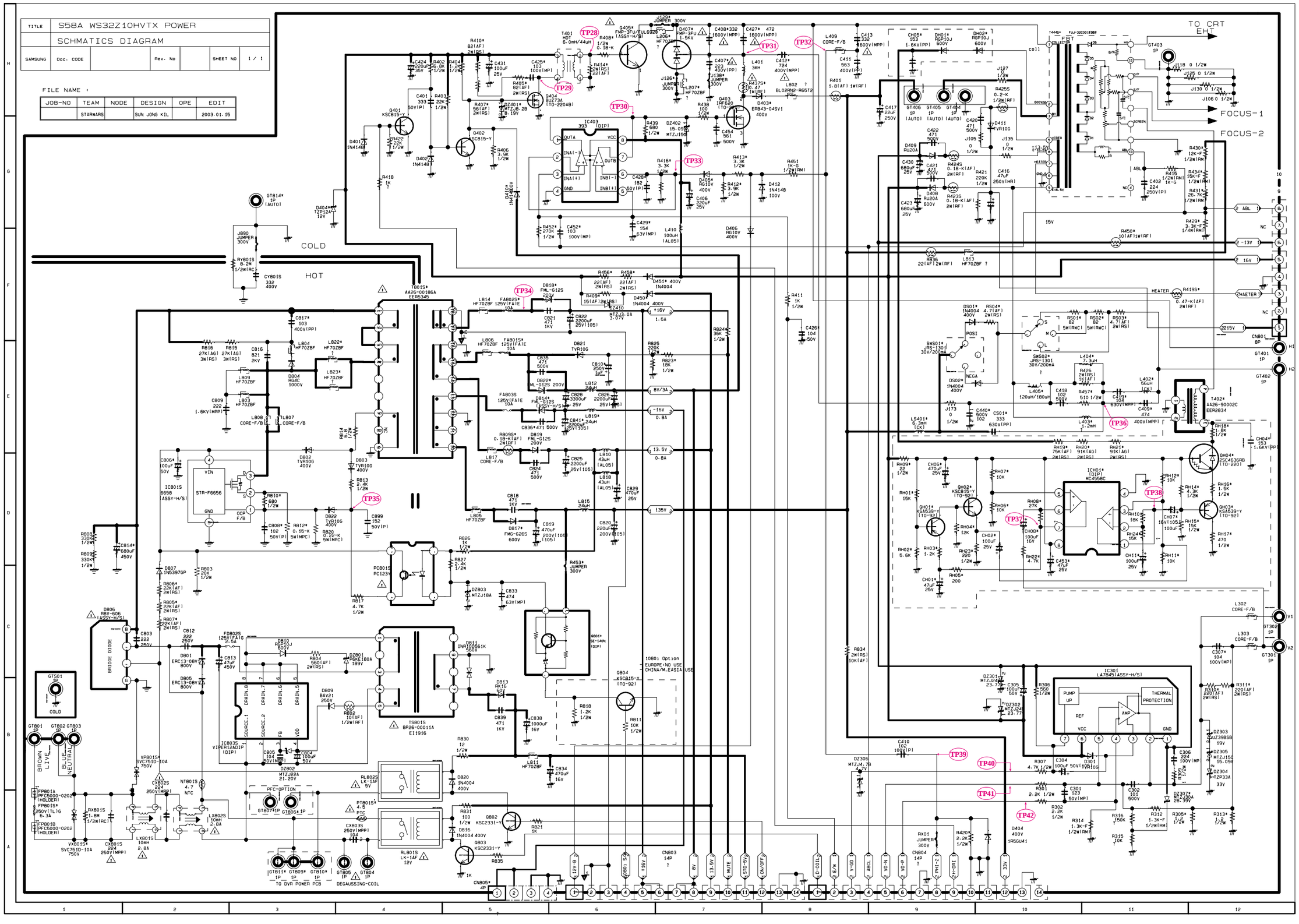
5-4 MAIN 4


BLOCK NAME : SOUND PROCESS
SURROUND
MAIN
WOOFER
CENTER
AC3 MODULE
H003
AA95-02082A
AA95-02082A
ASSY-DOLBY_DIGITAL
IC602
TDA7050 (DIP)
IC603
TDA7490
(ASSY-H/S)
IC604
TDA7490
IC605
TDA7490
(ASSY-H/S)
IC606
TDA7482 (ASSY-H/S)
CN602A
11P
CN704A
8P
CN601A
4P
CN603A
BOARD
CN604A
12P ?
SOUND LINE OUT
FROM BACK TERMINAL 2 BOARD
AUDIO SPK' OUT
FROM BACK TERMINAL 2 BOARD
COAXIAL_IN
OPTICAL_IN
5V_B2
12V_B
S+16V
S-16V
TP14
TP15
TP16
TP17
TP18
TP19
TP20
TP21
TP22
TP23
TP24
TP25
TP26
TP27
4/4

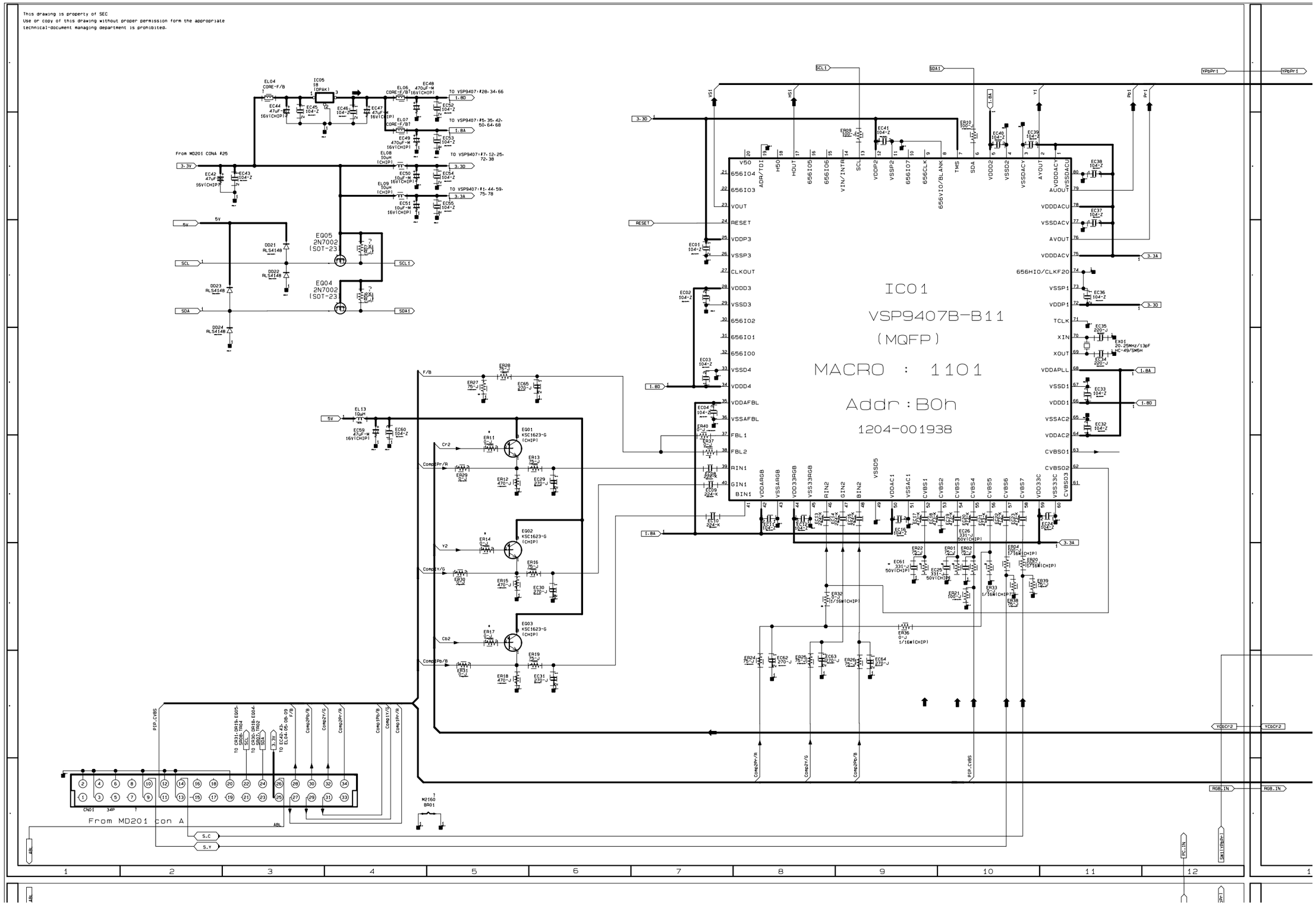
5-5 MICOM


IC901
SDA6001-B11
(MQFP)
IC902
M27V160
IC903
4564132
(TSOP)
IC907
S3P9428(QFP)
IC905
1086
(TO-263)
IC906
FAN1616AS25X
(SOT-223)
IC908
24C08
IC909
24C02
CN901
30P
CN902
32P
FB.SW1
FB.SW2
5V.CHECK
RST.IN
BRK.IN
BRK.OUT
TTX.CVBS
KEY1
KEY2
MAIN_AFT
5V_CHECK
BRK_IN
3.3V_A
3.3V_B
5.0V_A
5.0V_B
VSYNC
HSYNC
CDR/RSTOUT
BLANK/CORBLA
XTAL1
XTAL2
R
G
B
CVBS2
CVBS3
CVBS1B
CVBS1A
TMODE
TCK
TMS
TDI
TDO
SCL_ID
SDA_ID
SCL1
SDA1
SCL2
SDA2
SCL3
SDA3
MP
SPOT
S_RESET2
S_MUTE
S_SW1
S_SW2
PWR_RESET
PWR_SCL
PWR_SDA
PWR_STDBY
PWR_CLK
POWER
LED1
LED2
TILT
LOGO_ON
D_CTL
FAV_IR/PS_ID
WP_ID
Y6A_ID
S3P_RESET
WT_SW1
WT_SW2
PT_SW1
PT_SW2
SC2_ID
SC1_ID
SC3_ID
FB_SW2
FB_SW1
DEF_SW2
DEF_SW1
DEF_SW3
TILT
SCL2
SDA2
S_SW1_ID
DTV/DVD2_ID
FAV_IR/PS_ID
SC2_ID
SC1_ID
SC3_ID
FB_SW2
FB_SW1
DEF_SW2
DEF_SW1
DEF_SW3
TILT
SCL2
SDA2
LDQM
UDQM
WR
RD
CSROM
CLKEN
CSSDRAM
CLKSDRAM
MEMCLK
A15/CAS
A14/RAS
BYTEVPP
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A16
A17
A18
A19
VSS
XIN
XOUT
TEST
RESET
VDD
P0.2/SI
P0.3/CLO
P0.4/AD8
P0.5/AD9
P0.6/AD10
P0.7/AD11/PWM0
P3.1
P3.3
P1.0/T0/ZCD
P1.1/BUZ
P1.2/INT0
P3.3/INT1/PWM1
P2.7/AD7/SCLK
P2.6/AD6/SDAT
AVREF
P0.1/SO
P0.0/SCK
P3.0
P3.2
P2.0/AD0
P2.1/AD1
P2.2/AD2
P2.4/AD4
P2.5/AD5
AVSS
P6.0
P6.1
P6.2
P6.3
P6.4
P6.5
P6.6
P5.0
P5.1
P5.2
P5.3
P5.4
P5.5
P5.6
P5.7
P5.8
P5.9
P5.10
P5.11
P5.12
P5.13
P5.14
P5.15
P3.0
P3.1
P3.2
P3.3
P3.4
P3.5
P3.6
P3.7
P3.8
P3.9
P3.10
P3.11
P3.12
P3.13
P3.14
P3.15
P2.0
P2.1
P2.2
P2.3
P2.4
P2.5
P2.6
P2.7
P2.8
P2.9
P2.10
P2.11
P2.12
P2.13
P2.14
P2.15
P4.6/CS
P4.4/A20
P4.3/A19
P4.2/A18
P4.1/A17
P4.0/A16
RSTIN
TITLE
STARWARS PAL MICOM MODULE
MODEL
WS32Z10
SAMSUNG
Doc. CODE
Rev. No
SHEET NO
1 / 1

5-6 POWER


TITLE
S58A WS32Z10HVTX POWER
SCHMATICS DIAGRAM
SAMSUNG
Doc. CODE
Rev. No
SHEET NO
1 / 1
FILE NAME :
JOB-NO
TEAM
NODE
DESIGN
OPE
EDIT
STARWARS
SUN JONG KIL
2003.01.15
TO CRT
EHT
FOCUS-1
FOCUS-2
COLD
HOT
BRIDGE DIODE
PFC-OPTION
TO DYR POWER PCB
DEGAUSSING-COIL
10801 Option
EUROPE+NO USE
CHINA/M_EASIA USE
TP28
TP29
TP30
TP31
TP32
TP33
TP34
TP35
TP36
TP37
TP38
TP39
TP40
TP41
TP42

5-7 F-BOX 1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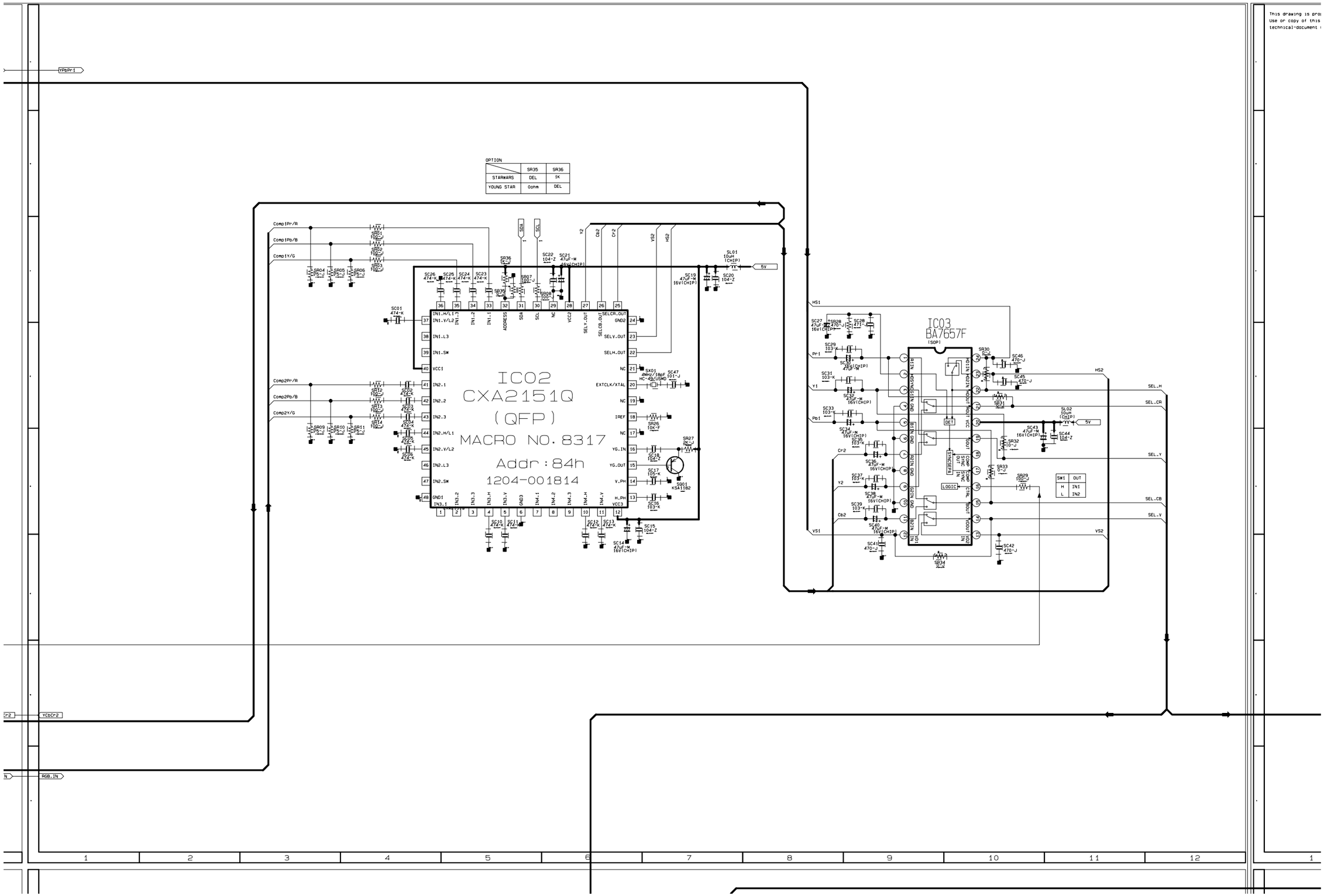
IC01
VSP9407B-B11
(MQFP)
MACRO : 1101
Addr : B0h
1204-001938
From MD201 CONA #25
From MD201 con A
CN01 34P
M2160
BA01
PIP_CVBS
S_C
S_Y
RGB_IN
YCbCr2
YPbPr1
SCL1
SDA1
RESET
TO VSP9407 #28, 34, 66
TO VSP9407 #5, 35, 42, 50, 64, 68
TO VSP9407 #7, 12, 25, 72, 38
TO VSP9407 #1, 44, 59, 75, 78

5-8 F-BOX 2



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5-9 F-BOX 3

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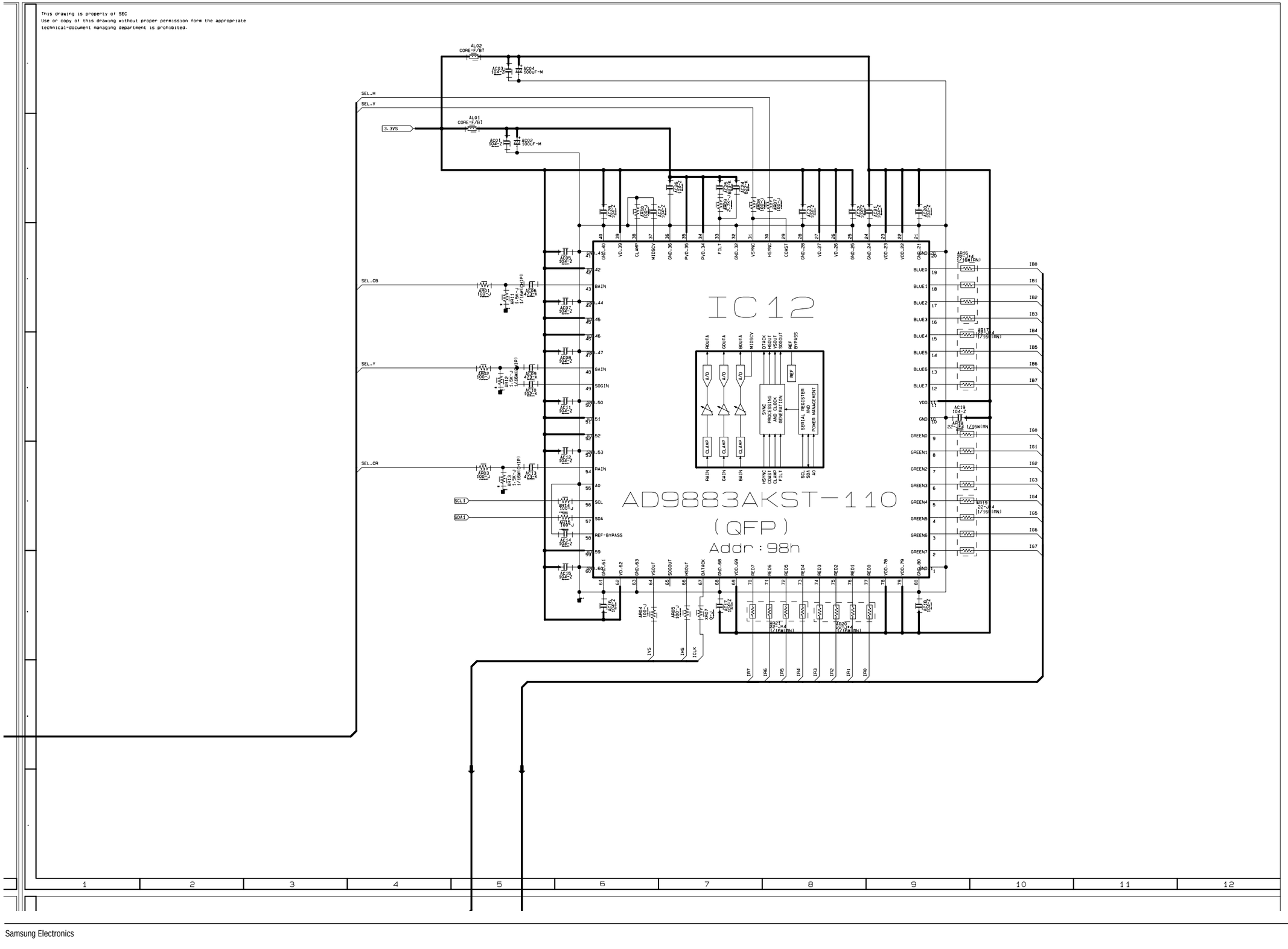
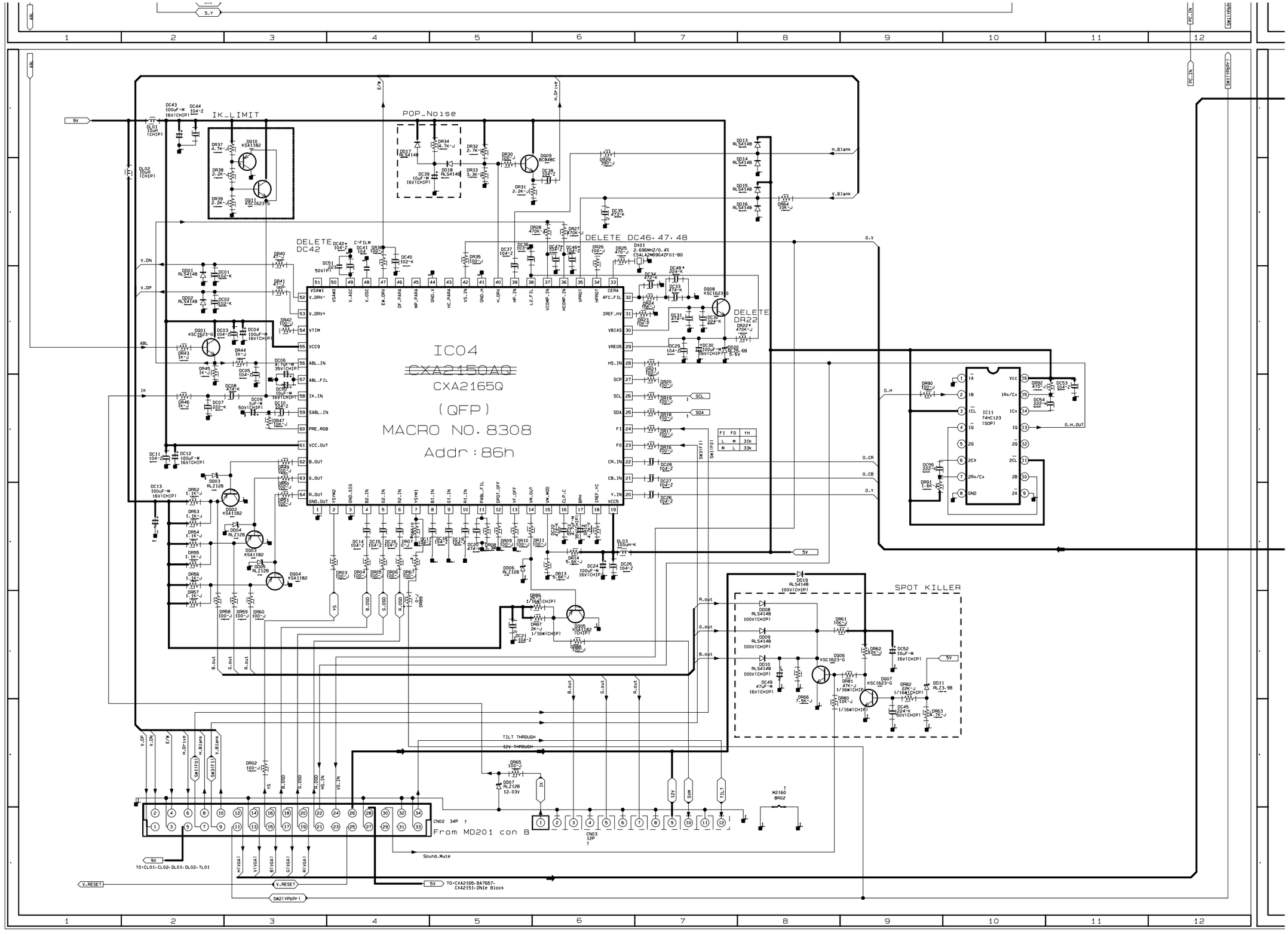
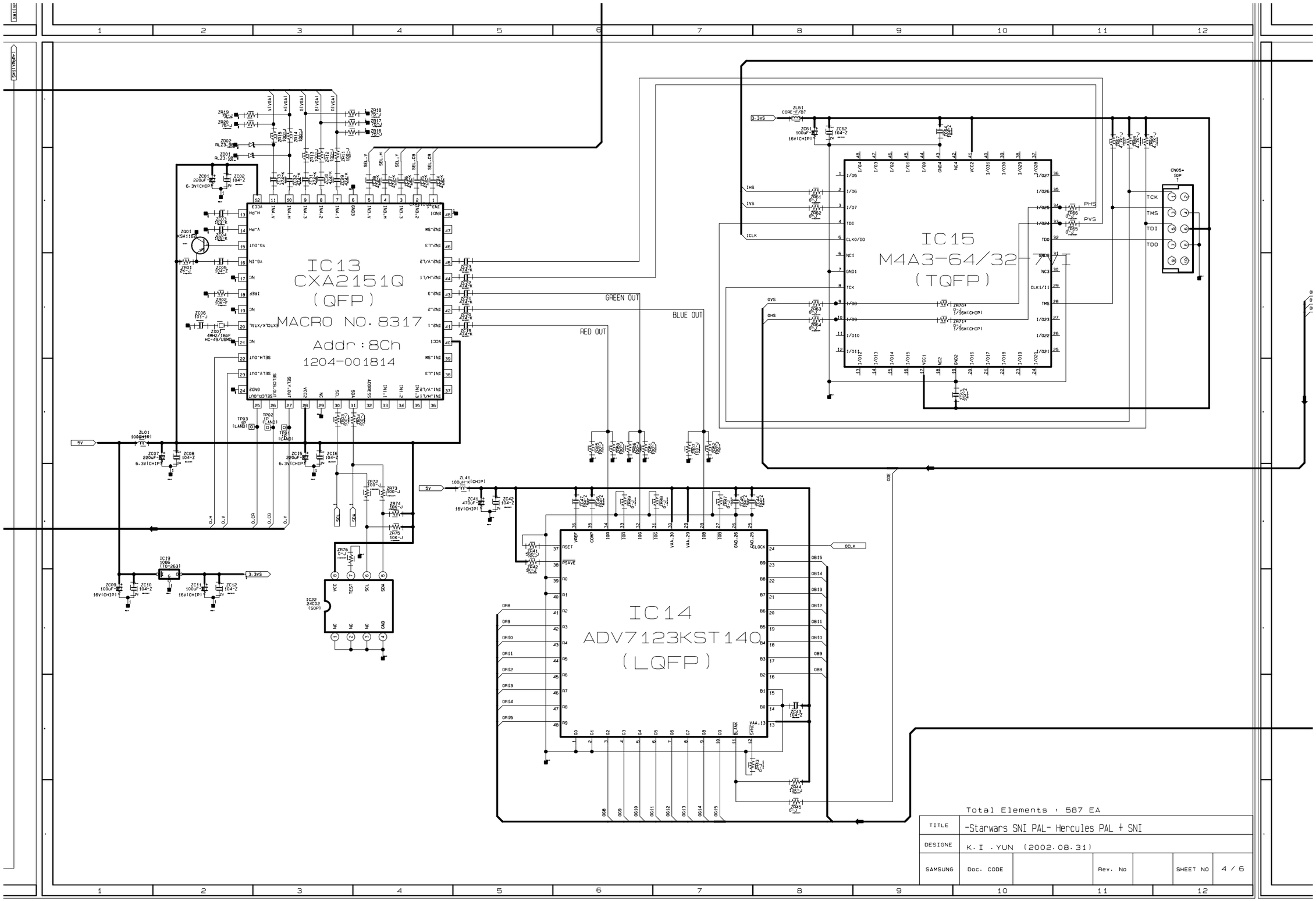


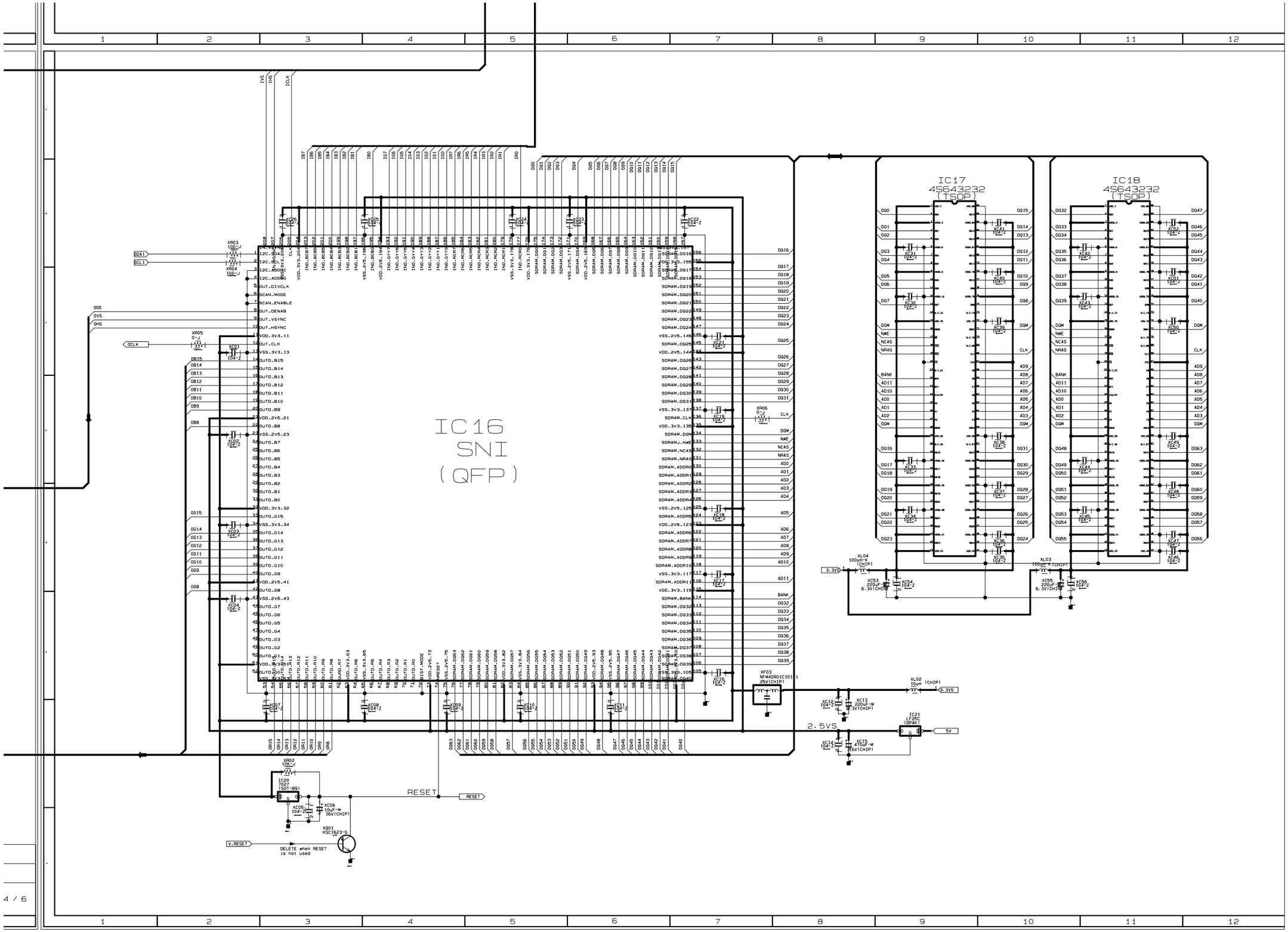
5-10 F-BOX 4


IC04
CXA2150AQ
CXA2165Q
(QFP)
MACRO NO. 8308
Addr : 86h
IK_LIMIT
POP_Noise
DELETE DC42
DELETE DC46.47.48
DELETE DR22
SPOT KILLER
From MD201 con B
Sound_Mute
TILT THROUGH
12V THROUGH
TO:CL01.CL02.DL01.DL02.TL01
TO:CXA2165.BA7657.CXA2151.DNie Block
9V
5V
12V
SW
TILT
E/W
H.DRIVE
H.Blank
V.Blank
V_DP
V_DN
IK
ABL
R.Out
G.Out
B.Out
O.H
O.V
O.CR
O.CB
O.Y
O.H.OUT
SCL
SDA
SW(FD)
SW(FI)
SW1(YPbPr)
V.RESET
H/VGA1
V/VGA1
B/VGA1
C/VGA1
B/VGA1
CN02 34P
CN03 12P
M2160
BR02
IC11 74HC123 (SOP)
DX01 2.696MHZ/0.4% CSALA2M69G4ZF01-B0
C-FILM
S.Y
PC.IN
SW1(YPbPr)

5-11 F-BOX 5


IC13
CXA2151Q
(QFP)
MACRO NO. 8317
Addr : 8Ch
1204-001814
IC15
M4A3-64/32-7/I
(TQFP)
IC14
ADV7123KST140
(LQFP)
IC22
24C02
(SOP)
GREEN OUT
BLUE OUT
RED OUT
Total Elements : 587 EA
TITLE
-Starwars SNI PAL- Hercules PAL + SNI
DESIGNE
K.I .YUN (2002.08.31)
SAMSUNG
Doc. CODE
Rev. No
SHEET NO
4 / 6

5-12 F-BOX 6


IC16
SNI
(QFP)
IC17
4S643232
(TSOP)
IC18
4S643232
(TSOP)
RESET
V_RESET
DELETE when RESET is not used
2.5VS
3.3VS
5V

5-13 CRT

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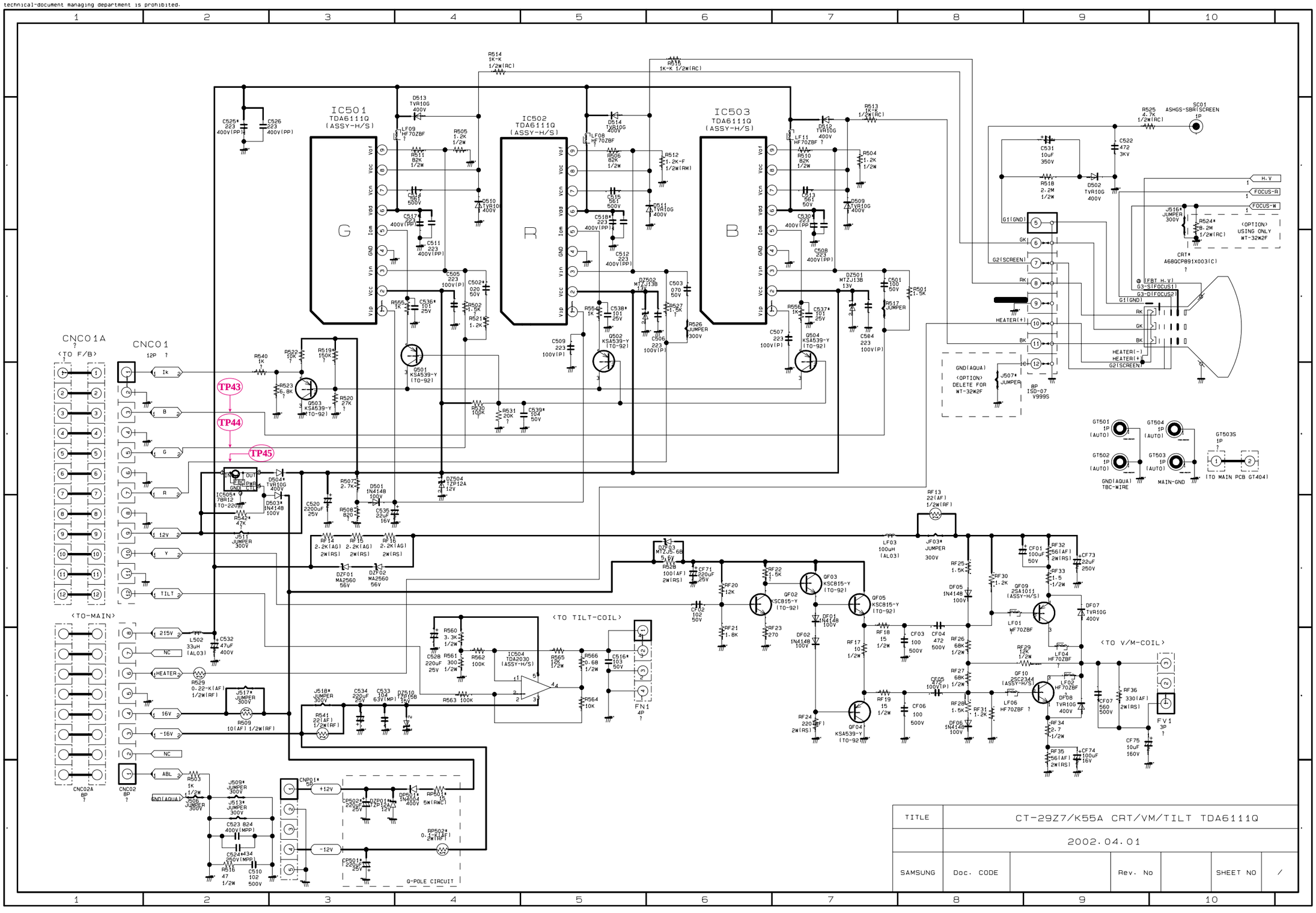
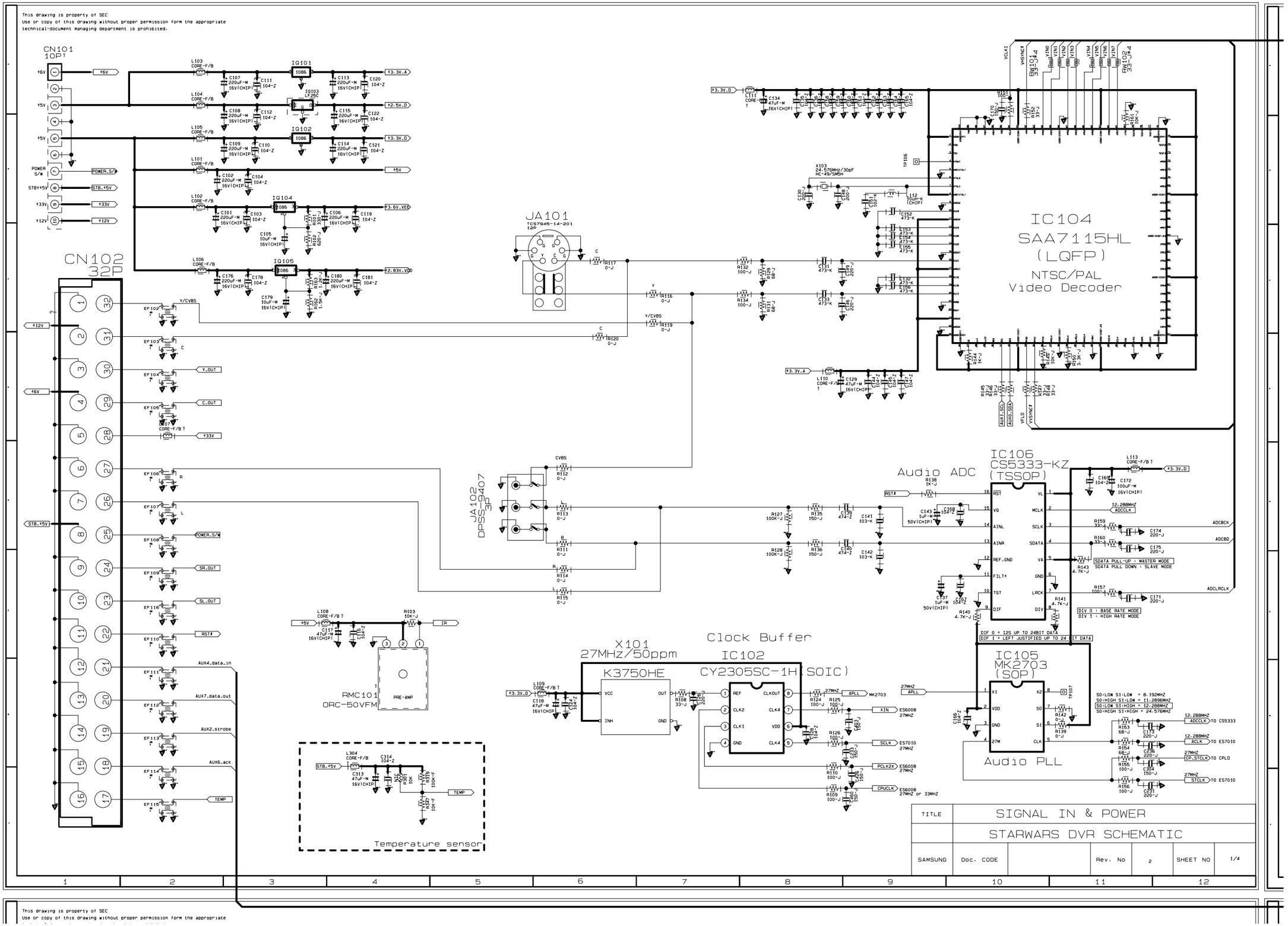
technical-document managing department is prohibited.



5-14 DVR 1



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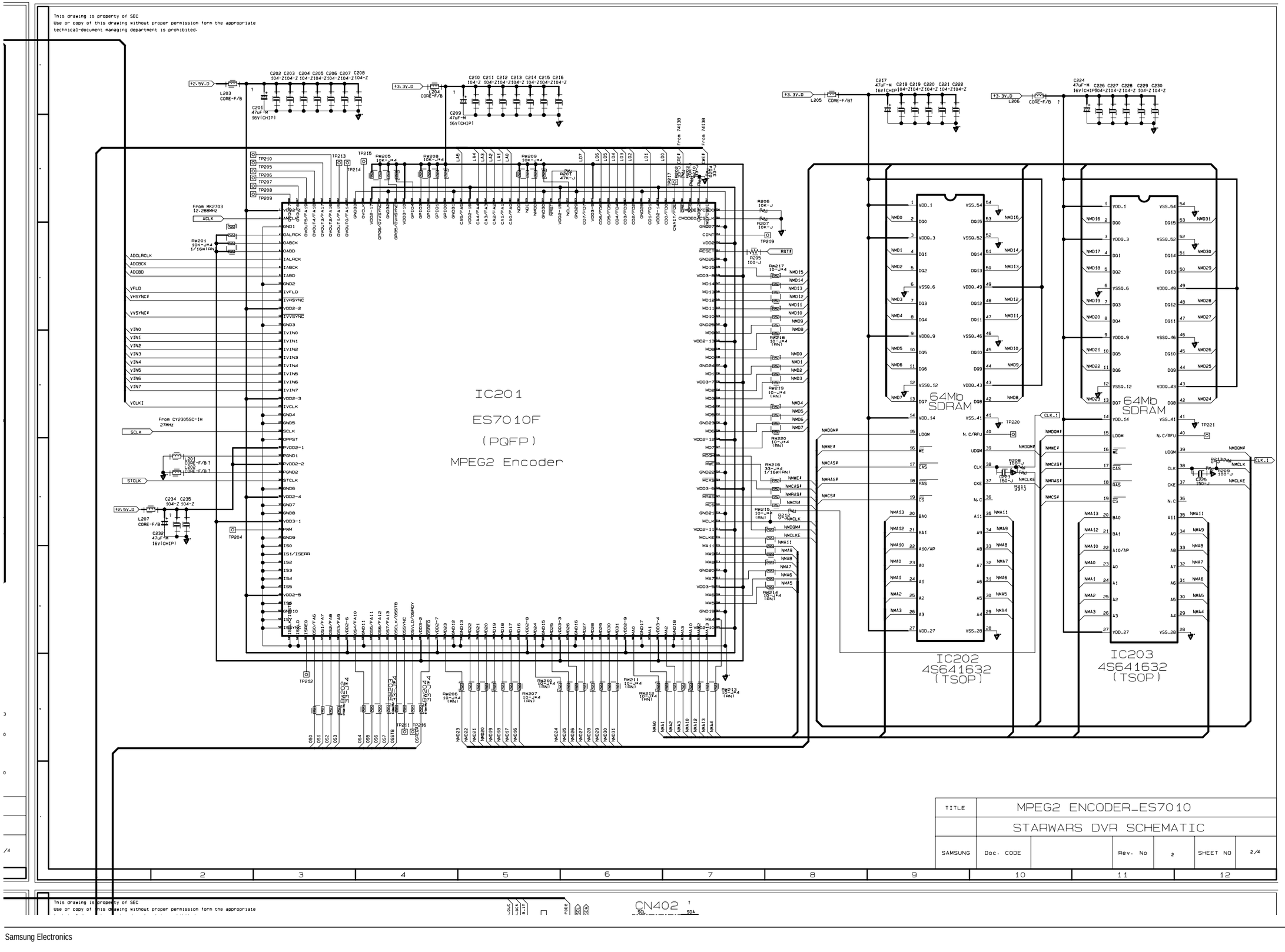
5-15 DVR 2


This drawing is property of SEC
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technical-document managing department is prohibited.
IC201
ES7010F
(PQFP)
MPEG2 Encoder
IC202
4S641632
(TSOP)
IC203
4S641632
(TSOP)
64Mb SDRAM
TITLE
MPEG2 ENCODER_ES7010
STARWARS DVR SCHEMATIC
SAMSUNG
Doc. CODE
Rev. No
SHEET NO
2/4
CN402

5-16 DVR 3

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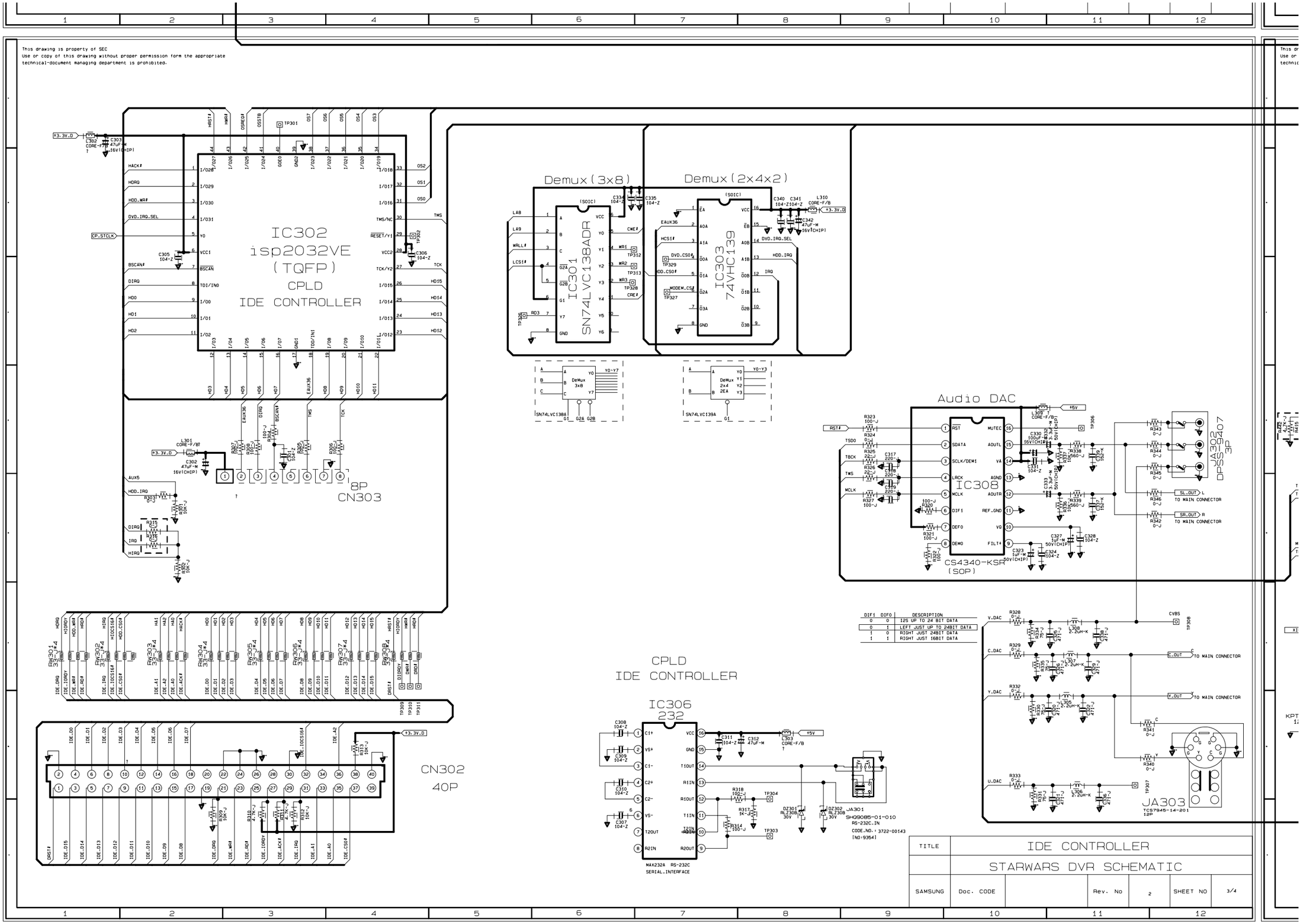
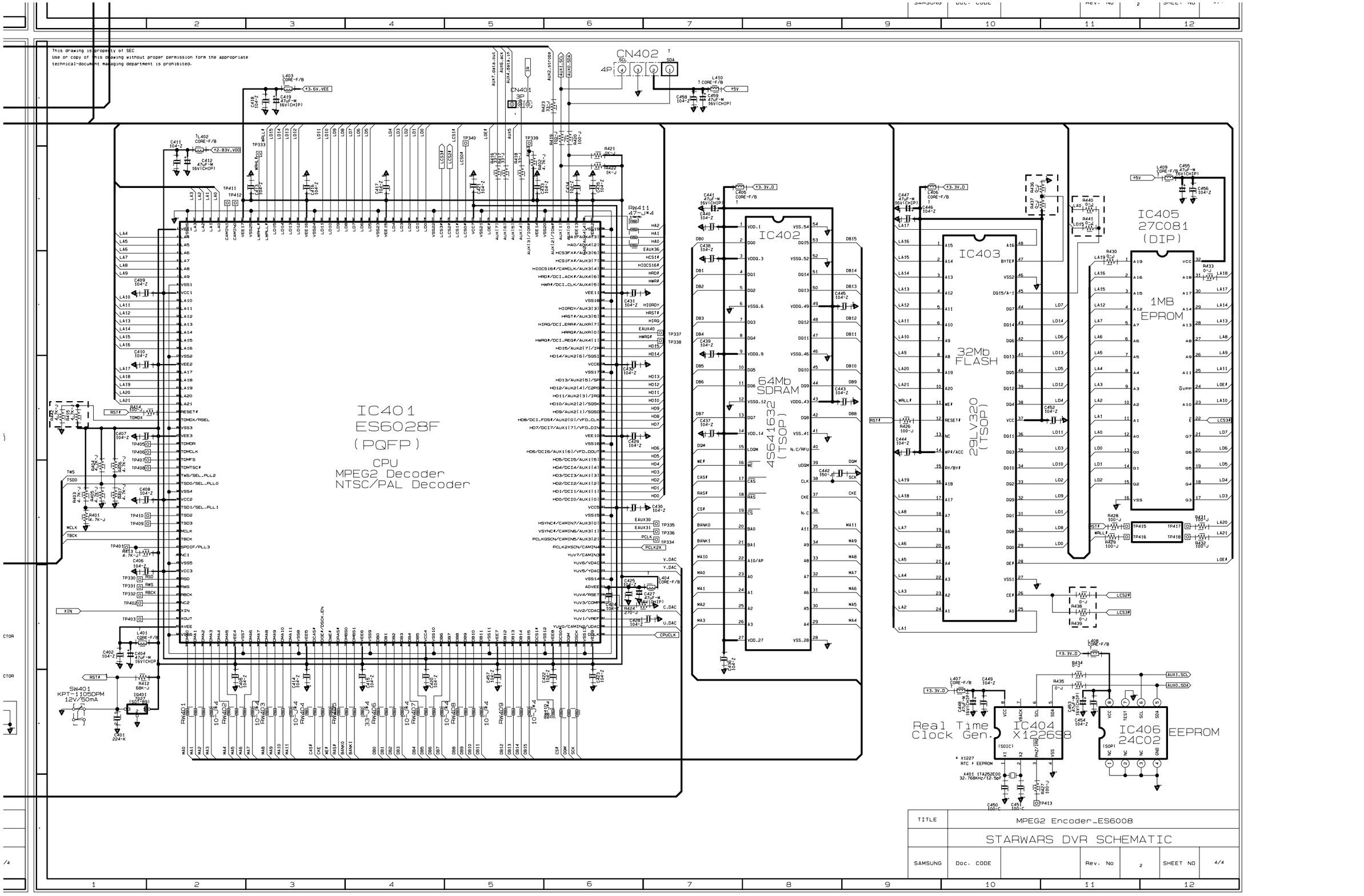
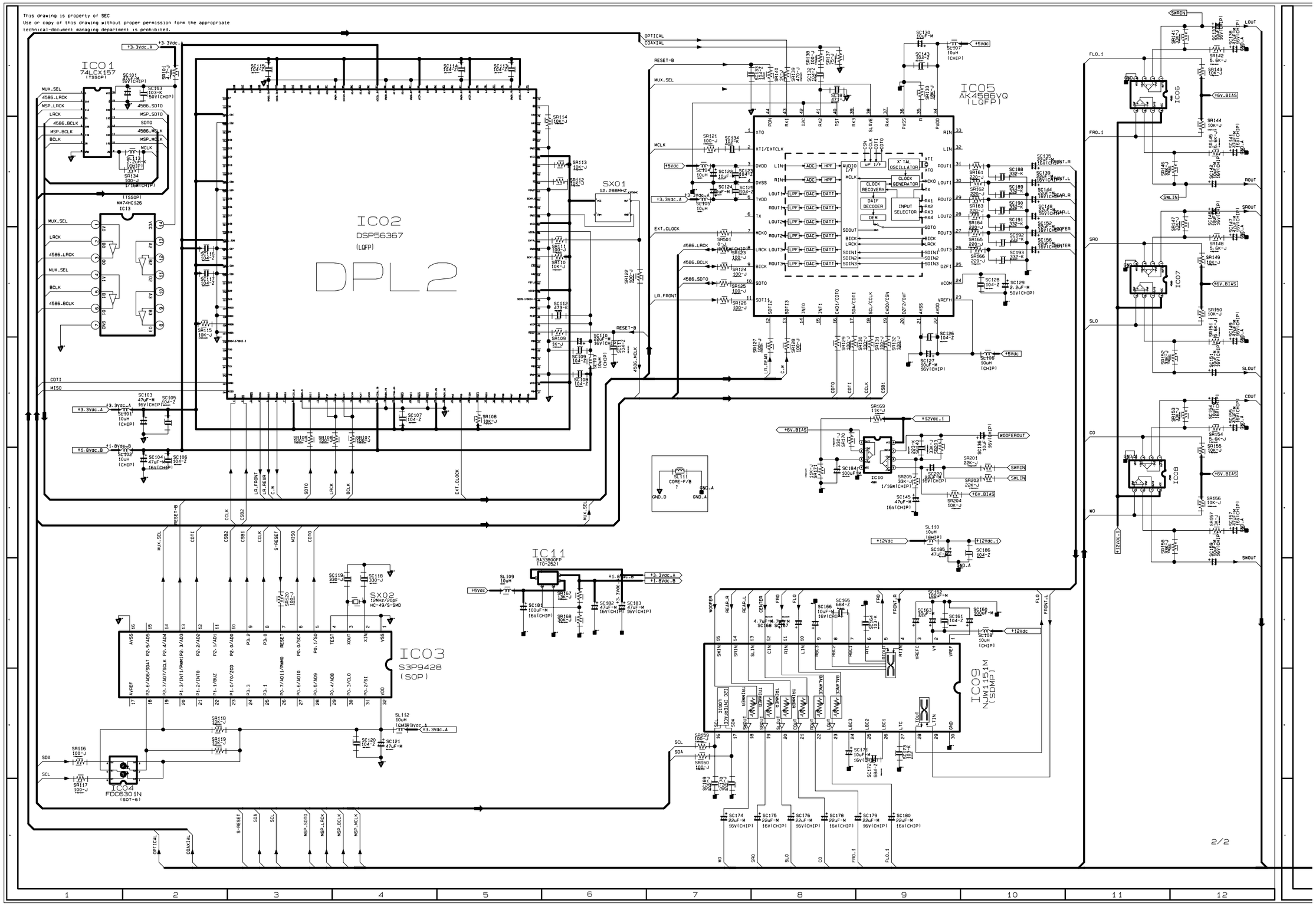


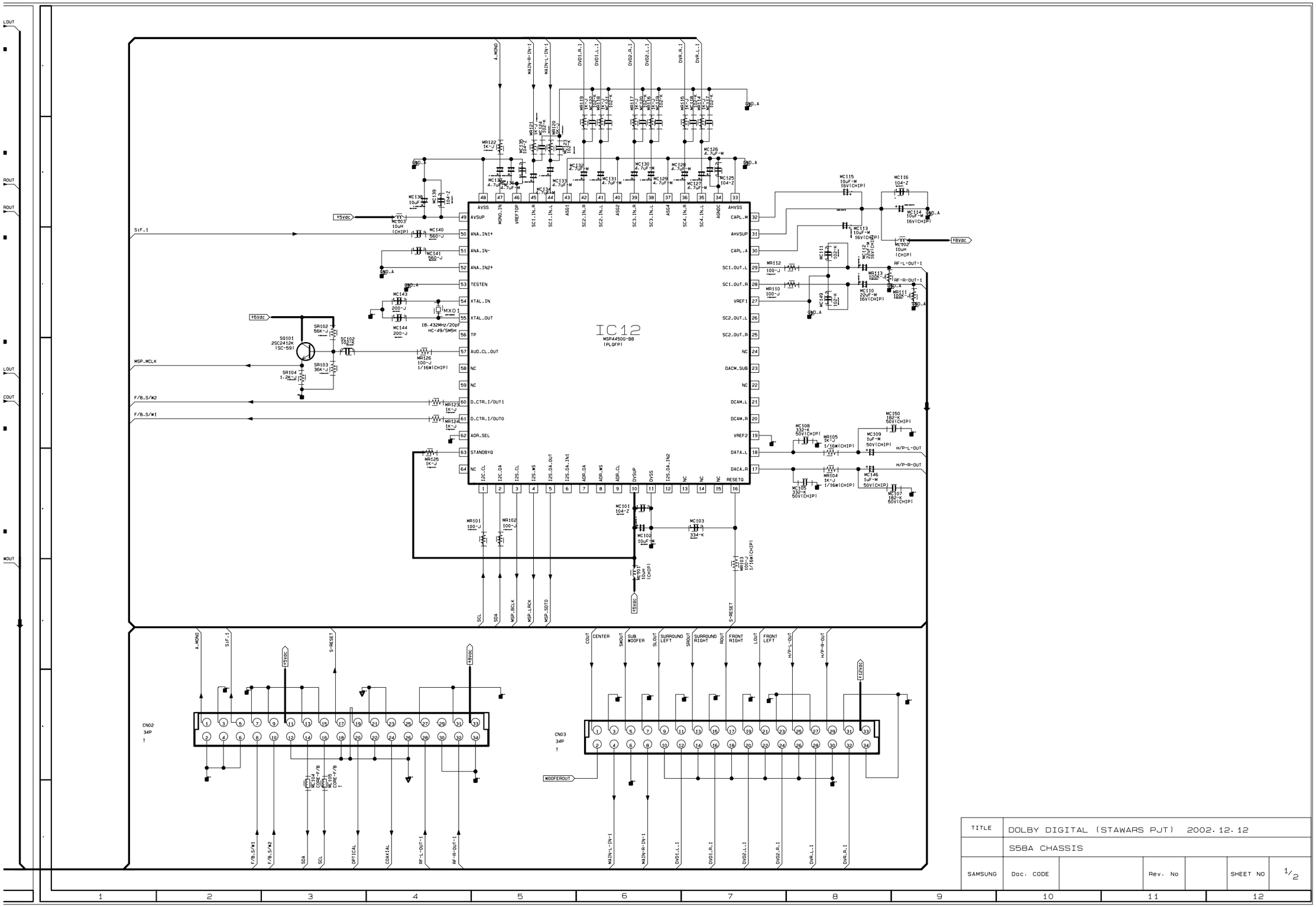
5-17 DVR 4


This drawing is property of SEC
Use or copy of this drawing without proper permission form the appropriate technical-document managing department is prohibited.
IC401
ES6028F
(PQFP)
CPU
MPEG2 Decoder
NTSC/PAL Decoder
CN402
CN401
IC402
64Mb SDRAM
4S641632 (TSOP)
IC403
32Mb FLASH
29LV320 (TSOP)
IC405
27C081 (DIP)
1MB EPROM
Real Time Clock Gen.
IC404
X1226S8
(SOIC)
IC406
24C02
EEPROM
(SOP)
SW401
KPT-1105DPM
12V/50mA
IC401
(PQFP)
TITLE
MPEG2 Encoder_ES6008
STARWARS DVR SCHEMATIC
SAMSUNG
Doc. CODE
Rev. No
SHEET NO
4/4

5-18 AC3 1/2

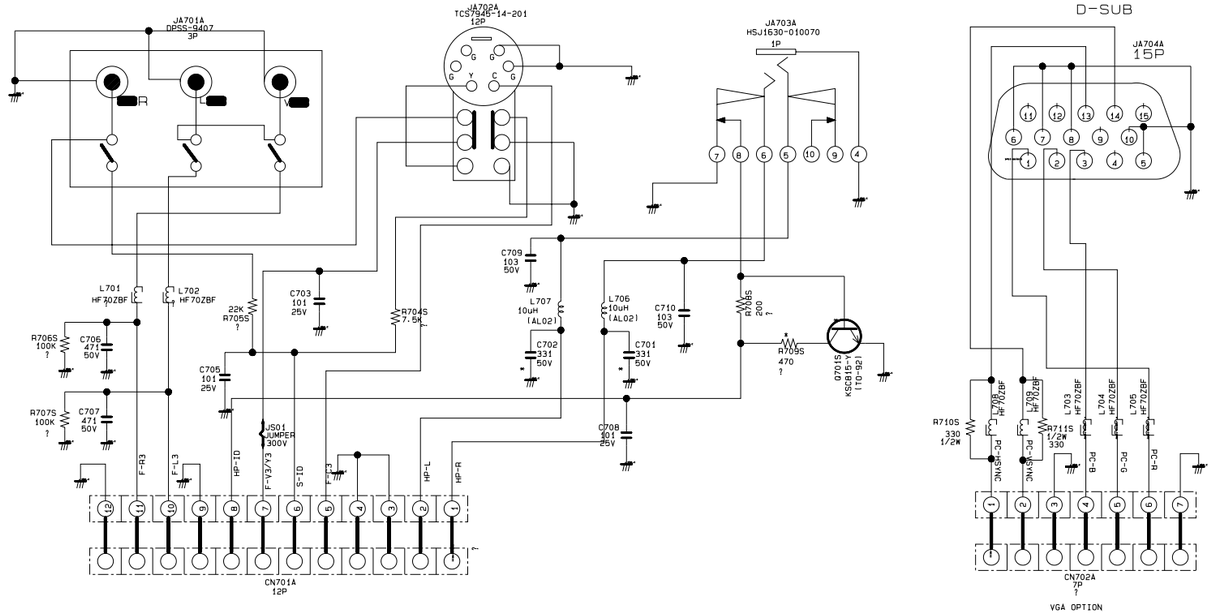

This drawing is property of SEC
Use or copy of this drawing without proper permission form the appropriate
technical-document managing department is prohibited.
IC01
74LCX157
(TSSOP)
IC02
DSP56367
(LQFP)
DPL2
SX01
12.288MHz
IC03
S3P9428
(SOP)
IC04
FDC6301N
(SOT-6)
IC05
AK4586VQ
(LQFP)
IC06
IC07
IC08
IC09
NJW1151M
(SDMP)
IC10
IC11
BA33B00FP
(TO-252)
SX02
12MHz/20pF
HC-49/S-SMD
OPTICAL
COAXIAL
RESET-B
MUX.SEL
MCLK
EXT.CLOCK
LR.FRONT
LR.REAR
C.W
SDTO
LRCK
BCLK
CDTI
MISO
CCLK
CSB2
CSB1
S-RESET
MSDI
CDTO
SDA
SCL
MSP.SDTO
MSP.LRCK
MSP.BCLK
MSP.MCLK
+3.3Vdc.A
+1.8Vdc.B
+5Vdc
+12Vdc
+12Vdc.1
+6V.BIAS
SWR1N
SWL1N
WOOFEROUT
FLO.1
FRO.1
SRO
SLO
WO
CO
SROUT
SLOUT
COUT
SWOUT
FLO
FRONT.L
FRONT.R
REAR.L
REAR.R
CENTER
WOOFER
2/2

5-19 AC3 2/2

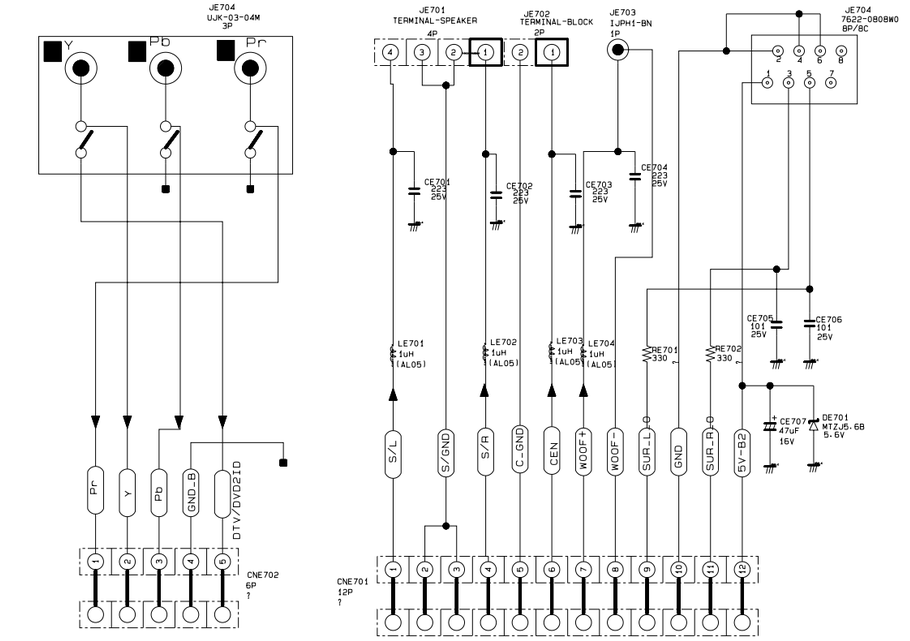


TITLE	DOLBY DIGITAL (STAWARS PJT) 2002.12.12					
	S58A CHASSIS					
SAMSUNG	Doc. CODE		Rev. No		SHEET NO	1/12

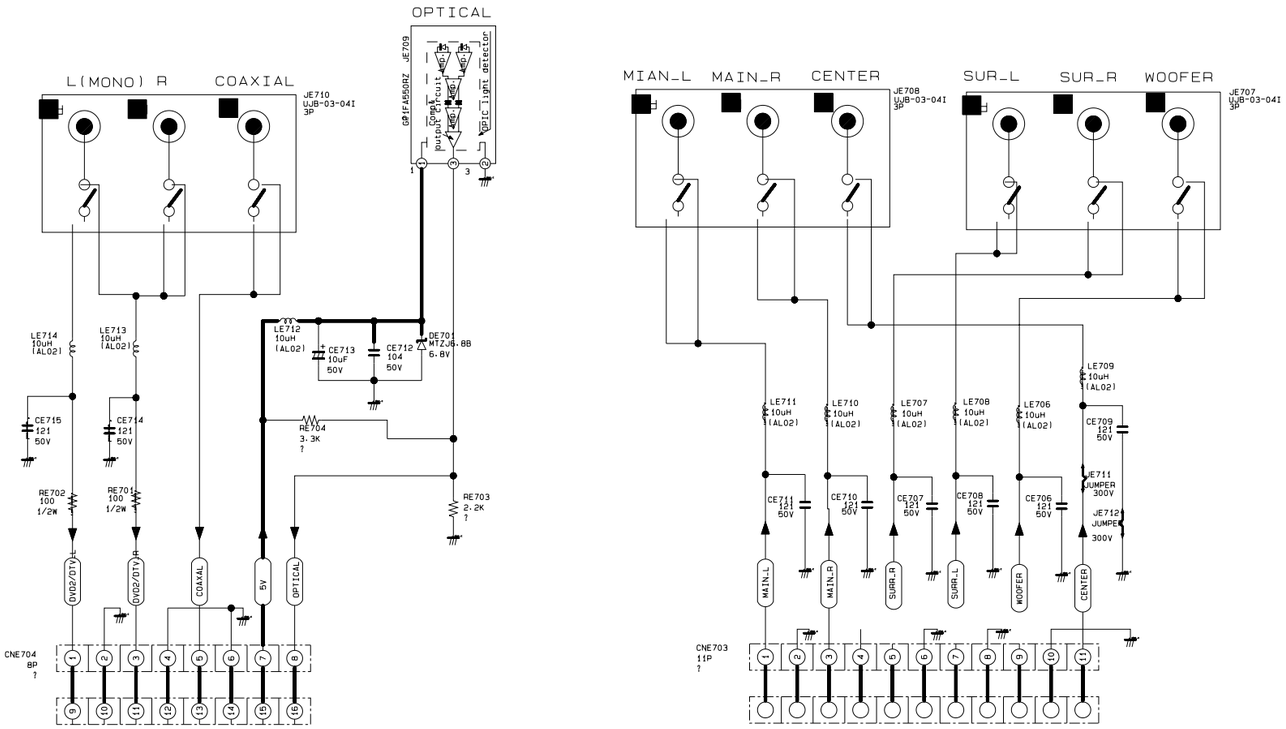
5-20 A/V SIDE



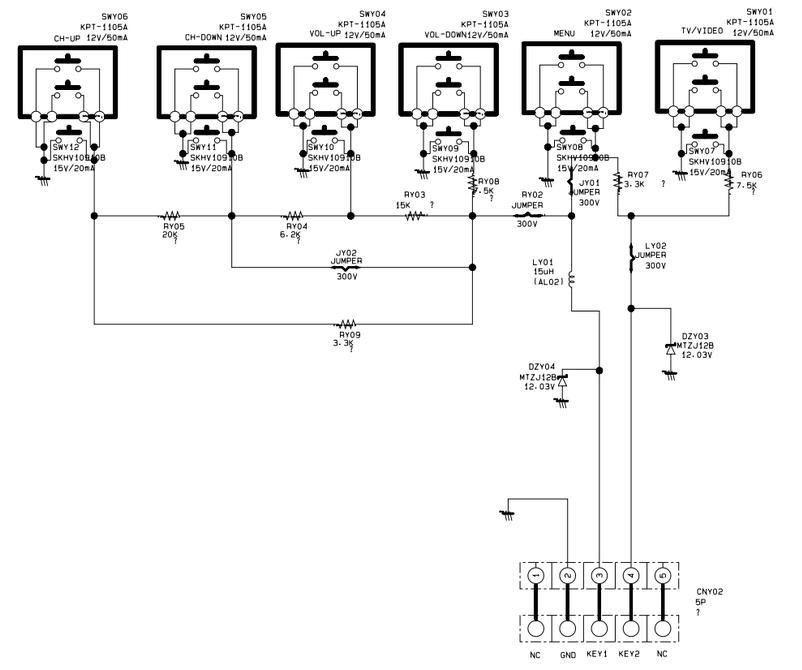
5-21 AV TERMINAL



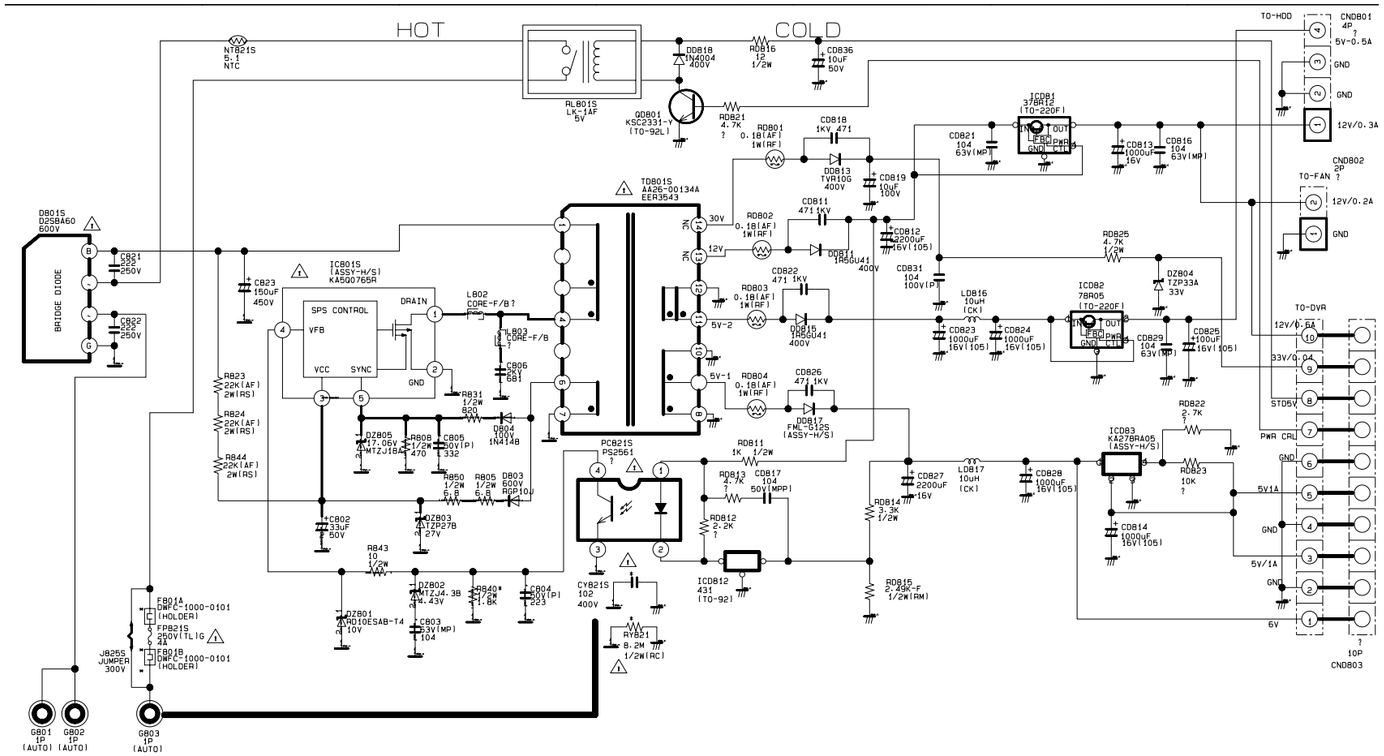
5-22 DOLBY TERMINAL



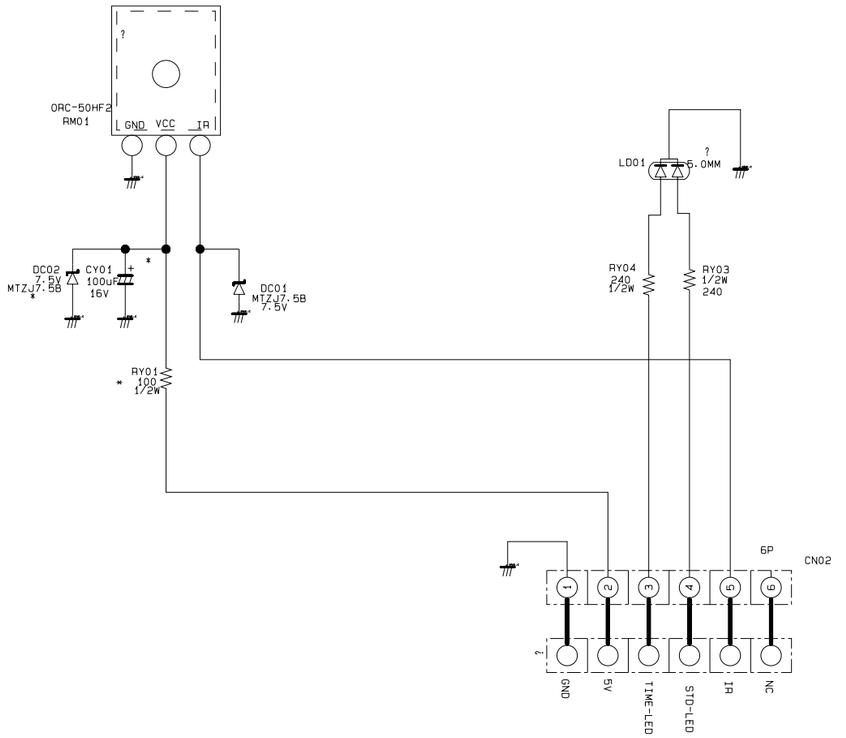
5-23 CONTROL



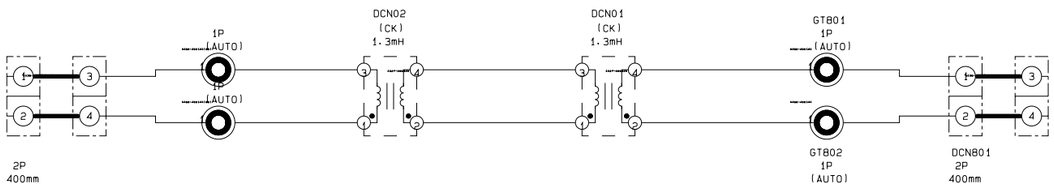
5-24 SUB POWER



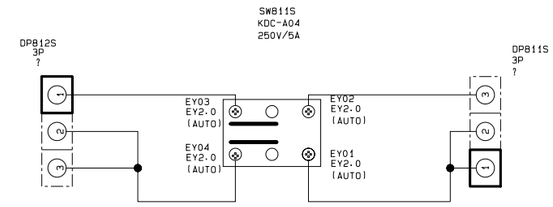
5-25 LED



5-25 PFC

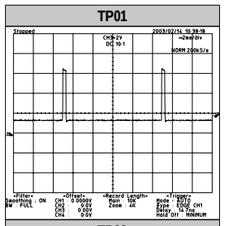


5-26 MASTER SWITCH

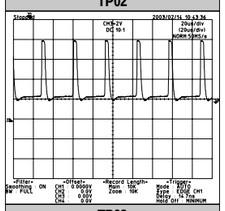


S58A(StarWars) Waveforms

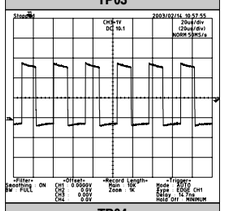
TP01



TP02



TP03



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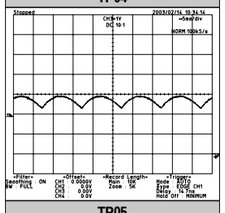
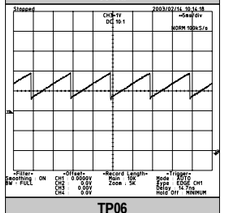
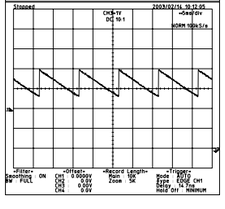


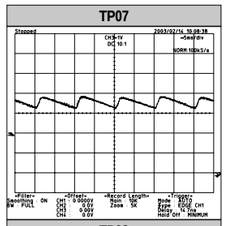
TP05



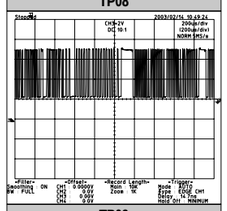
TP06



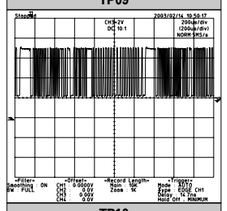
TP07



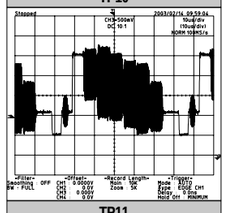
TP08



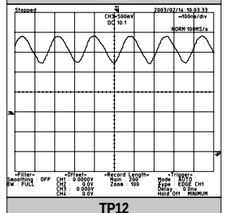
TP09



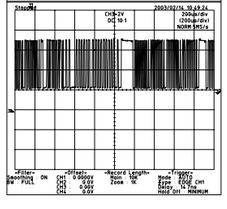
TP10



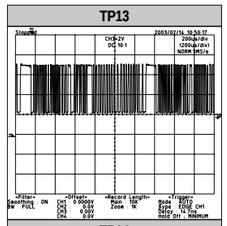
TP11



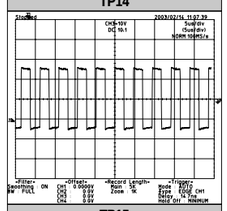
TP12



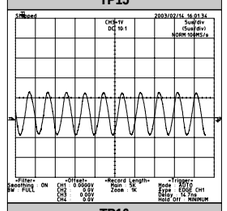
TP13



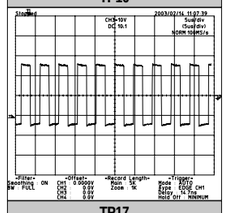
TP14



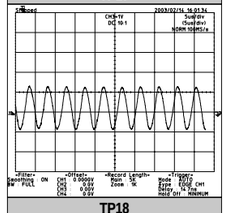
TP15



TP16



TP17



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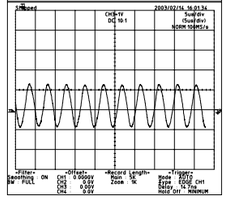

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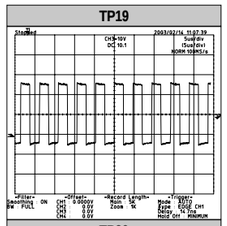

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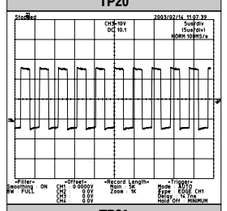

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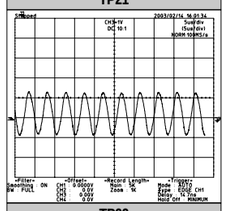

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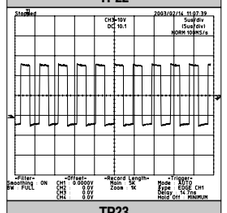

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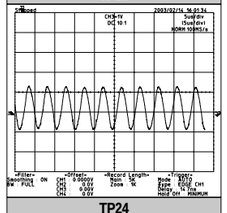

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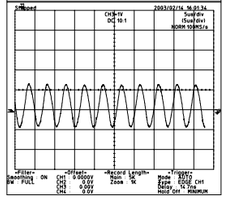

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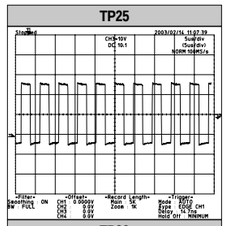

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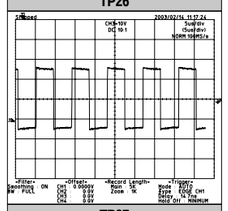

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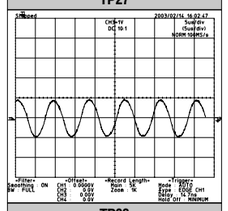
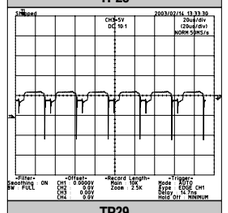
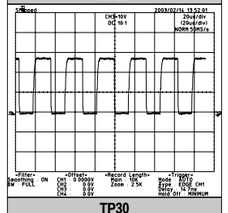


TP28



TP29



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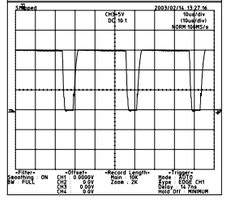

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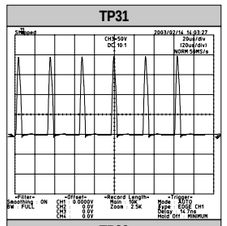

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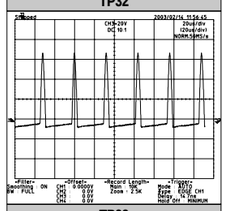

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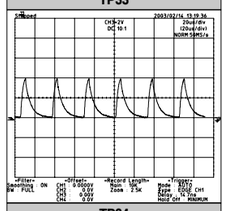
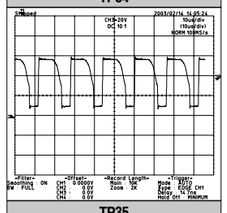
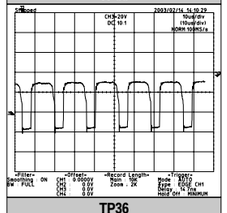


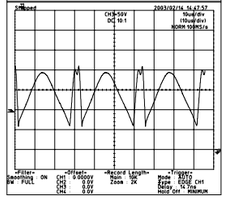
TP34



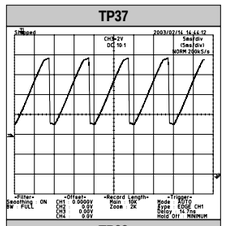
TP35



TP36



TP37



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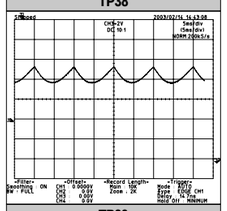

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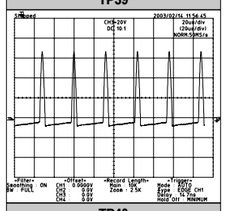

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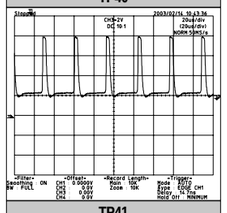
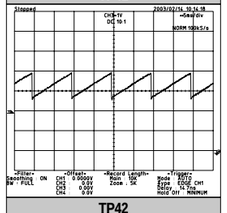


TP41



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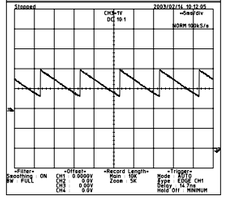
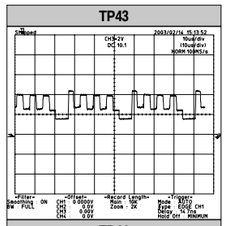
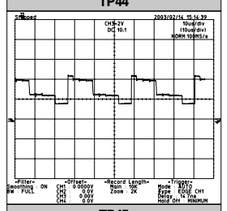
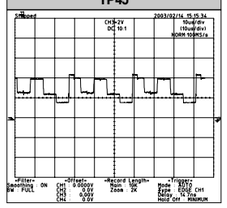


TP43



TP44



TP45